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EXAMINER				
ROBERTS, JESSICA M				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/519,840

Applicant(s)

VELTMAN ET AL.

Examiner

JESSICA ROBERTS

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/ISD)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 12/30/2009.

DETAILED ACTION

Status of the Claims

Claims 1-13 are currently pending in Application No. 10/519,840. Claims 11-13 have been added by Applicants amendment filed on 11/02/2009.

Response to Arguments

Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection.

As to Applicants argument regarding that Koto fails to disclose that the calculation of the time stamp or the PTS are a result of decoding encoding information having a longest period of time out of periods of time after the encoding process is started until encoded information is outputted.

The Examiner respectfully disagrees. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., calculation of the time stamp or the PTS are a result of decoding encoding information having a longest period of time out of periods of time after the encoding process is started until encoded information is outputted) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

As to Applicants argument that Koto fails to disclose a longest delay calculation means for calculating a longest picture encoding delay for encoding the pictures in the encoding apparatus based on encode conditions, as recited in claim 1.

The Examiner respectfully disagrees. Koto discloses at the transmitting side, after coding data is inputted, it is outputted after delay by the transmission buffer 171. Since each size of the transmission buffer 171 and the receive buffer 173 is the specified finite value, the delaying amount in each buffer must be controlled strictly not to cause underflow and overflow with each buffer, [0056]. Thus, it is clear to the Examiner that Koto determines a delay to prevent overflow and underflow of the buffer, which is a coding condition, which reads upon the claimed limitation

As to Applicants argument that Muso does not teach the freeze condition occurring when decoding a first encoded information of a plurality of encoded information, nor does Masuo teach any other reason to ignore a decoding start time set for the first encoded information of a plurality of encoded information. Thus, Applicant respectfully submit that Masuo fails to teach or suggest output control means that ignores a decoding start time set for a first encoded information of a plurality of encoded information stored in said storage means, starting the coding prior to the decoding start time of the first encoded information.

The Examiner respectfully disagrees. Masuo teaches a decoding start control means reads encoded video data from a buffering means based on information, including said decoding start time, supplies it to a decoding means, and makes decoding start in the first decoding Mohd. Standard decoding Mohd who performs the same

decoding as having the numerals side by this is realized. A decoding start control means reads encoded video data from a buffering means based on the monitored result of a buffering monitoring means, supplies it to a decoding means, and makes decoding start in the second decoding Mohd. This Mohd is special decoding Mohd who can make it decode without using information, including decoding start time etc, [0016-0017].

Since Masuo discloses a decoding start control means reads encoded video data from a buffering means based on information, including said decoding start time, supplies it to a decoding means, and makes decoding start in the first decoding Mohd. Standard decoding Mohd who performs the same decoding as having the numerals side by this is realized. A decoding start control means reads encoded video data from a buffering means based on the monitored result of a buffering monitoring means, supplies it to a decoding means, and makes decoding start in the second decoding Mohd. This Mohd is special decoding Mohd who can make it decode without using information, including decoding start time etc, it is clear to the Examiner that Masuo discloses a control means that decodes a first encoded video data and second video data, where the second decoded video data is not decoded using the start time of the first decoded data which reads upon the claimed limitation.

As to Applicants argument that the teachings of Shigeru and Masuo are combined, the combination does not teach or suggest the decoding apparatus recited in Claim 5.

The Examiner respectfully disagrees. Shigeru teaches A decoding apparatus for executing a decoding process on a plurality of encoded information encoded with an encoding system capable of at least B-pictures for inter-prediction-encoding, said decoding apparatus comprising: storage means for temporarily storing restored image information sequentially created by the decoding process ([0007], fig. 4 elements 60, 72-74, and fig. 1 elements 60, 72-74) and for temporarily storing the encoded information (fig. 4 element 71); and output control means for controlling output of the restored image information stored in said storage means (Shigeru teaches where the fame memory reading-and-writing control section 64 controls a reproduced image output [0022] and fig. 4 element 64), wherein said output control means ([0022] and fig. 4 element 64), when restored image information fails (figs. 4, 1 elements 60) to be stored in said storage means (figs. 4, 1 elements 72-74) re-outputs restored image information outputted just before the failure ([0023]). Shigeru is silent in regards to ignores a decoding start time set for a first encoded information of a plurality of encoded information stored in said storage means, to start decoding prior to the decoding start time of the first encoded information.

However, Masuo teaches to ignores a decoding start time set for a first encoded information of a plurality of encoded information. ([0025], [0030] stored in said storage

means (the main memory 6 is used for buffering of the encoded video data which is needed in this decoding process, or storing of reference video signal data [0027] and [0015]), to start decoding prior to the decoding start time of the first encoded information

(A decoding start control means reads encoded video data from a buffering means based on information, including said decoding start time, supplies it to a decoding means, and makes decoding start in the first decoding Mohd. Standard decoding Mohd who performs the same decoding as having the numerals side by this is realized. A decoding start control means reads encoded video data from a buffering means based on the monitored result of a buffering monitoring means, supplies it to a decoding means, and makes decoding start in the second decoding Mohd. This Mohd is special decoding Mohd who can make it decode without using information, including decoding start time etc, [0016-0017]. Since Masuo discloses a decoding start control means reads encoded video data from a buffering means based on information, including said decoding start time, supplies it to a decoding means, and makes decoding start in the first decoding Mohd. Standard decoding Mohd who performs the same decoding as having the numerals side by this is realized. A decoding start control means reads encoded video data from a buffering means based on the monitored result of a buffering monitoring means, supplies it to a decoding means, and makes decoding start in the second decoding Mohd. This Mohd is special decoding Mohd who can make it decode without using information, including decoding start time etc, it is clear to the Examiner that Masuo discloses a control means that decodes a first encoded video data and

second video data, where the second decoded video data is not decoded using the start time of the first decoded data which reads upon the claimed limitation.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Masuo with Shigeru for providing improved image quality.

Double Patenting

1. Applicant is advised that should claims 1 and 5 be found allowable, claims 11 and 13 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Koto et al., JP-09-247670.

As to **claim 1**, Koto teaches An encoding apparatus for executing an encoding process with an encoding system capable of treating at least B-pictures as pictures for inter-prediction-encoding, the encoding apparatus comprising: longest delay calculation means for calculating a longest picture encoding delay for encoding in the encoding apparatus based on encode conditions (Koto discloses at the transmitting side, after coding data is inputted, it is outputted after delay by the transmission buffer 171. Since each size of the transmission buffer 171 and the receive buffer 173 is the specified finite value, the delaying amount in each buffer must be controlled strictly not to cause underflow and overflow with each buffer, [0056]. Thus, it is clear to the Examiner that Koto determines a delay to prevent overflow and underflow of the buffer, which is a coding condition, which reads upon the claimed limitation); timing calculation means (In the packet-zing treating part 33, and 34-1-34-n, packet-zing , calculation of a time stamp, section of the order of multiplexing, etc, are made using these side information, [0022]) for, anticipating that a plurality of encoded information created by performing the encoding process ([0018], [0041] and fig. 1 elements 15 and 16) will be sequentially decoded on a decoding side (DTS: decoding time stamp, [0026]), calculating output timing for results of decoding the encoded information (PTS: presentation time stamp, [0026]); and timing notification means for notifying said decoding side of output timing calculated by said timing calculation means before a result of decoding corresponding encoded information is obtained ([0034]).

As to **claim 3**, see the rejection and analysis made in **claim 1**, except this is a method claim to the apparatus of **claim 1**. Thus the rejection and analysis made for claim also applies.

As to **claim 11**, claim 11 has been rejected with respect to claim 1.

3. Claims 2, 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Koto et al., JP-09-247670 and in view of Binford et al., US-6,285,405.

As to **claim 2**, Koto teaches the encoding apparatus according to claim 1, wherein said timing calculation means calculates the output timing for the results of decoding the encoded information ([0022]). Koto is silent in regards to a difference between the longest picture encoding delay and the delay to encode the encoded information.

However, Binford teaches a difference between the longest picture encoding delay and the delay to encode the encoded information (Binford teaches where the target audio delay values are based on the video encode/decode delay values. Audio codec 212 determines if there is a difference between the delay value currently being used and the target audio delay value in block 500. Audio codec 212 adds or subtracts delay in small incremental steps in block 502).

Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Binford with Koto for providing an

apparatus that determines and utilizes time delay values dynamically and does not require operator intervention to synchronize data signals, col. 1 line 30-37.

As to **claim 4**, see the rejection and analysis made in **claim 2**, except this is a method claim to the apparatus of **claim 2**. Thus the rejection and analysis made for claim also applies.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 5-10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shigeru et al. JP-8-149464 in view of Masuo et al., JP-9-9258.

As to **claim 5**, Shigeru teaches A decoding apparatus for executing a decoding process on a plurality of encoded information encoded with an encoding system capable of at least B-pictures for inter-prediction-encoding, said decoding apparatus

comprising: storage means for temporarily storing restored image information sequentially created by the decoding process ([0007], fig. 4 elements 60, 72-74, and fig. 1 elements 60, 72-74) and for temporarily storing the encoded information (fig. 4 element 71); and output control means for controlling output of the restored image information stored in said storage means (Shigeru teaches where the fame memory reading-and-writing control section 64 controls a reproduced image output [0022] and fig. 4 element 64), wherein said output control means ([0022] and fig. 4 element 64), when restored image information fails (figs. 4, 1 elements 60) to be stored in said storage means (figs. 4, 1 elements 72-74) re-outputs restored image information outputted just before the failure ([0023]). Shigeru is silent in regards to ignores a decoding start time set for a first encoded information of a plurality of encoded information stored in said storage means, to start decoding prior to the decoding start time of the first encoded information.

However, Masuo teaches to ignores a decoding start time set for a first encoded information of a plurality of encoded information ([0025], [0030] stored in said storage means (the main memory 6 is used for buffering of the encoded video data which is needed in this decoding process, or storing of reference video signal data [0027] and [0015]), to start decoding prior to the decoding start time of the first encoded information (A decoding start control means reads encoded video data from a buffering means based on information, including said decoding start time, supplies it o a decoding means, and makes decoding start in the first decoding Mohd. Standard decoding Mohd who performs the same decoding as having the numerals side by this is realized. A

decoding start control means reads encoded video data from a buffering means based on the monitored result of a buffering monitoring means, supplies it to a decoding means, and makes decoding start in the second decoding Mohd. This Mohd is special decoding Mohd who can make it decode without using information, including decoding start time etc, [0016-0017]. Since Masuo discloses a decoding start control means reads encoded video data from a buffering means based on information, including said decoding start time, supplies it o a decoding means, and makes decoding start in the first decoding Mohd. Standard decoding Mohd who performs the same decoding as having the numerals side by this is realized. A decoding start control means reads encoded video data from a buffering means based on the monitored result of a buffering monitoring means, supplies it to a decoding means, and makes decoding start in the second decoding Mohd. This Mohd is special decoding Mohd who can make it decode without using information, including decoding start time etc, it is clear to the Examiner that Masuo discloses a control means that decodes a first encoded video data and second video data, where the second decoded video data is not decoded using the start time of the first decoded data which reads upon the claimed limitation.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Masuo with Shigeru for providing improved image quality.

As to **claim 6**, Shigeru is silent in regards to the decoding apparatus according to claim 5, wherein: when a failure occurs, offsets a lag from the decoding start time

occurred due to ignoring the decoding start time, by re-outputting restored image information outputted just before the failure.

However, Masuo teaches when a failure occurs; offsets a lag from the decoding start time occurred due to ignoring the decoding start time, by re-outputting restored image information outputted just before the failure ([0038]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Masuo with Shigeru for providing improved image quality.

As to **claim 7**, Shigeru is silent in regards to the decoding apparatus according to claim 5, wherein: said storage means temporarily stores each piece of the encoded information: and said output control means, when a storing order of encoded information being stored in said storage means is different from an order before the encoding, re-outputs restored image information corresponding to the encoded information having a different order.

However, Masuo teaches said storage means temporarily stores each piece of the encoded information ([0027] and fig. 6); and said output control means, when a storing order of encoded information being stored in said storage means is different from an order before the encoding, re-outputs restored image information corresponding to the encoded information having a different order ([0035]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Masuo with Shigeru for providing improved image quality.

As to **claim 8**, see the rejection and analysis made in **claim 5**, except this is a method claim to the apparatus of **claim 5**. Thus the rejection and analysis made for claim also applies

As to **claim 9**, see there rejection and analysis for claim 6, except this is claim to a method with the same limitation as the apparatus of claim 6. Thus the rejection and analysis made for claim 6 also applies here.

As to **claim 10**, see the rejection and analysis made in **claim 7**, except this is method claim to the apparatus of claim 7. Thus the rejection and analysis made for claim 7 also applies here.

As to **claim 13**, claim 13 has been rejection with respect to claim 5.

7. Claim 12 is rejected under 35 U.S.C. 102(b) as being anticipated by Koto et al., JP-09-247670 in view of Well Known Prior Art (Official Notice).

As to **claim 12**, Koto teaches the encoding apparatus according to Claim 1, wherein the notification means adds the output times as header information to the encoded information (Koto teaches where in an MPEG coding, only from the header information of the coding data inputted, in order to compute each time stamp of

decoding time and display time, it must have delay of the maximum gap with display order and encoding order, and the header information of coding data must be analyzed one by one. In real time, this delaying amount cannot be disregarded in the transmission systems which perform coding, transmission, and decoding, [0007]. Koto is silent in that time stamps are included in the header. However, Official Notice is taken that it is notoriously well known and expected in the art that a time stamp is located in the header, see Henrion et al., US 5,127, 000, (fig. 9). Since, Koto teaches in order to compute each time stamp of decoding time and display time, it must have delay of the maximum gap with display order and encoding order, and the header information of coding data must be analyzed one by one. In real time, this delaying amount cannot be disregarded in the transmission systems which perform coding, transmission, and decoding, [0007], and it notoriously well known that the time stamp is located in header, it is clear to the Examiner that Koto incorporating the well known feature of the time stamp located a header, now discloses where the computed time stamp having the delay of the maximum gap with display order and encoding order are located in the header, which reads upon the claimed limitation.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JESSICA ROBERTS whose telephone number is (571)270-1821. The examiner can normally be reached on 7:30-5:00 EST Monday-Friday, Alt Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jessica Roberts/
Examiner, Art Unit 2621

/Andy S. Rao/
Primary Examiner, Art Unit 2621
January 17, 2010